



Pre-Bid Outreach Meeting
July 25, 2012



Pre-Bid Outreach Meeting

I-880 SOUTHBOUND HOV LANE PROJECT

❖ Contract No. 04-3A9214

(Ala-880 22.6/24.0 - South Segment - Marina Blvd. to Davis St.)

❖ Contract No. 04-3A9224

(Ala-880 24.0/25.5 - North Segment - Davis St. to Hegenberger Rd.)

Widen Freeway, Replace Overcrossings, and Reconstruct Ramps/roads.



Meeting Agenda

- **Welcome** — George Crosby, Small Business Liaison
- **CT Small Business Program** —
George Crosby, Small Business Liaison
- **I-880 Corridor Overview** — Gary Sidhu, Project Manager, Alameda County Transportation Commission.
- **Project Overview** — Caltrans and Alameda CTC Design Team
- **Question & Answers** — Caltrans and Alameda CTC Design Team
- **Networking** — George Crosby, Contractors network with DBEs and Small Businesses



Caltrans Small Business Program Goals

- **Increase Small Business Certification**
- **Increase Contracting Opportunities**
- **Create Relationships between Prime Contractors and Small Businesses**

- **Register your business today at:**
 - DGS Website

<http://www.pd.dgs.ca.gov/smbus/getcertified.htm>



Caltrans Executive Order S-11-0

“California Department of Transportation will encourage, and whenever possible, increase small business participation, including Disadvantage Business Enterprises (DBE), in federally-assisted highway and transit-related projects”

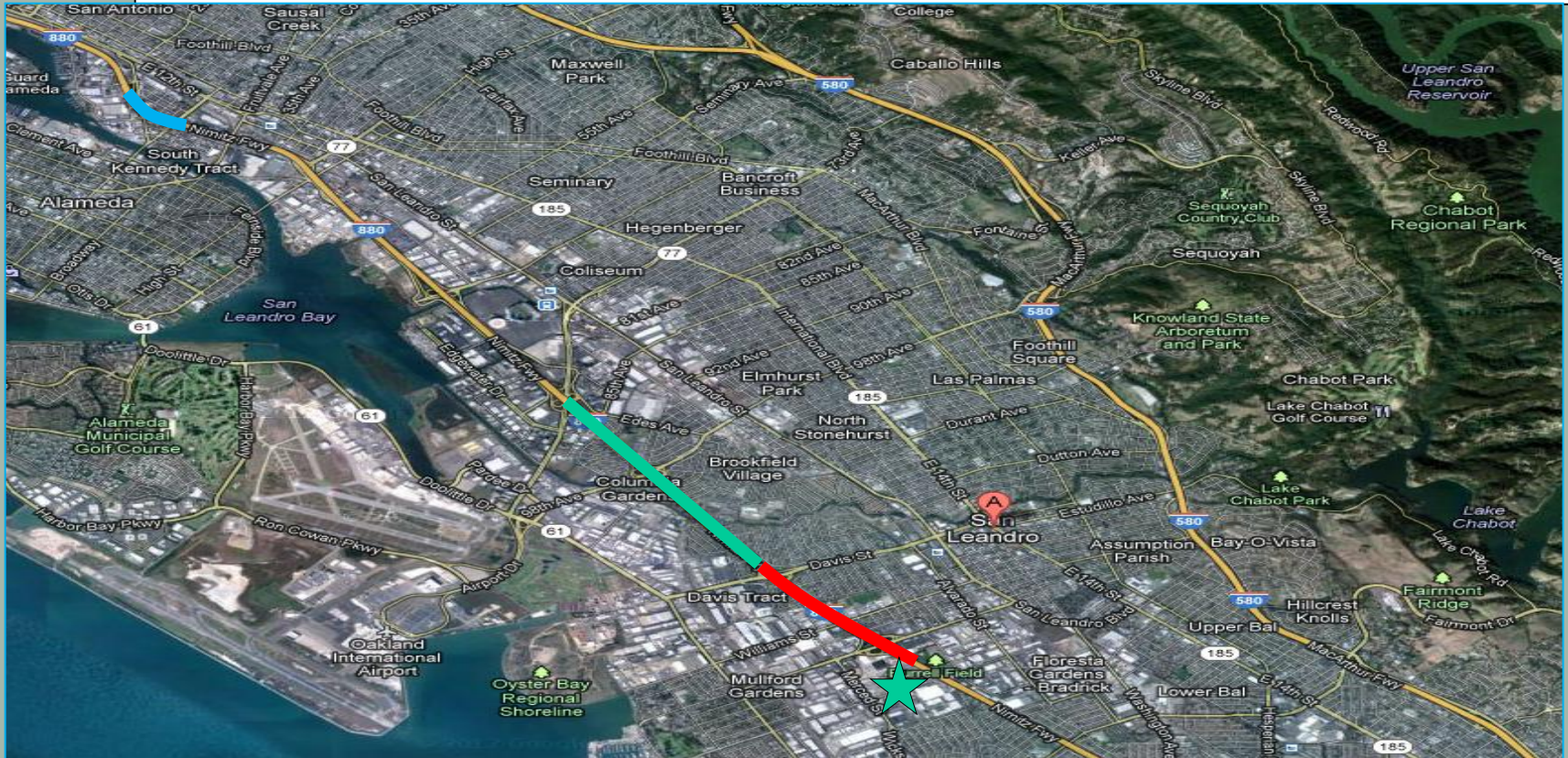
25% Certifies Small Business Enterprise (SBE) goal

13.5% Disadvantage Business Enterprise (DBE) goal

3% Disadvantage Veterans Business Enterprise (DBVE)
goal – (5% for all projects advertised until July 1, 2008)



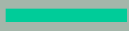
Construction Projects on I-880



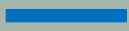
Kaiser Medical Center (Adjacent to State Right of Way)



I-880 SB HOV- South Segment – Contract No. 04-3A9214



I-880 SB HOV - North Segment – Contract No. 04-3A9224

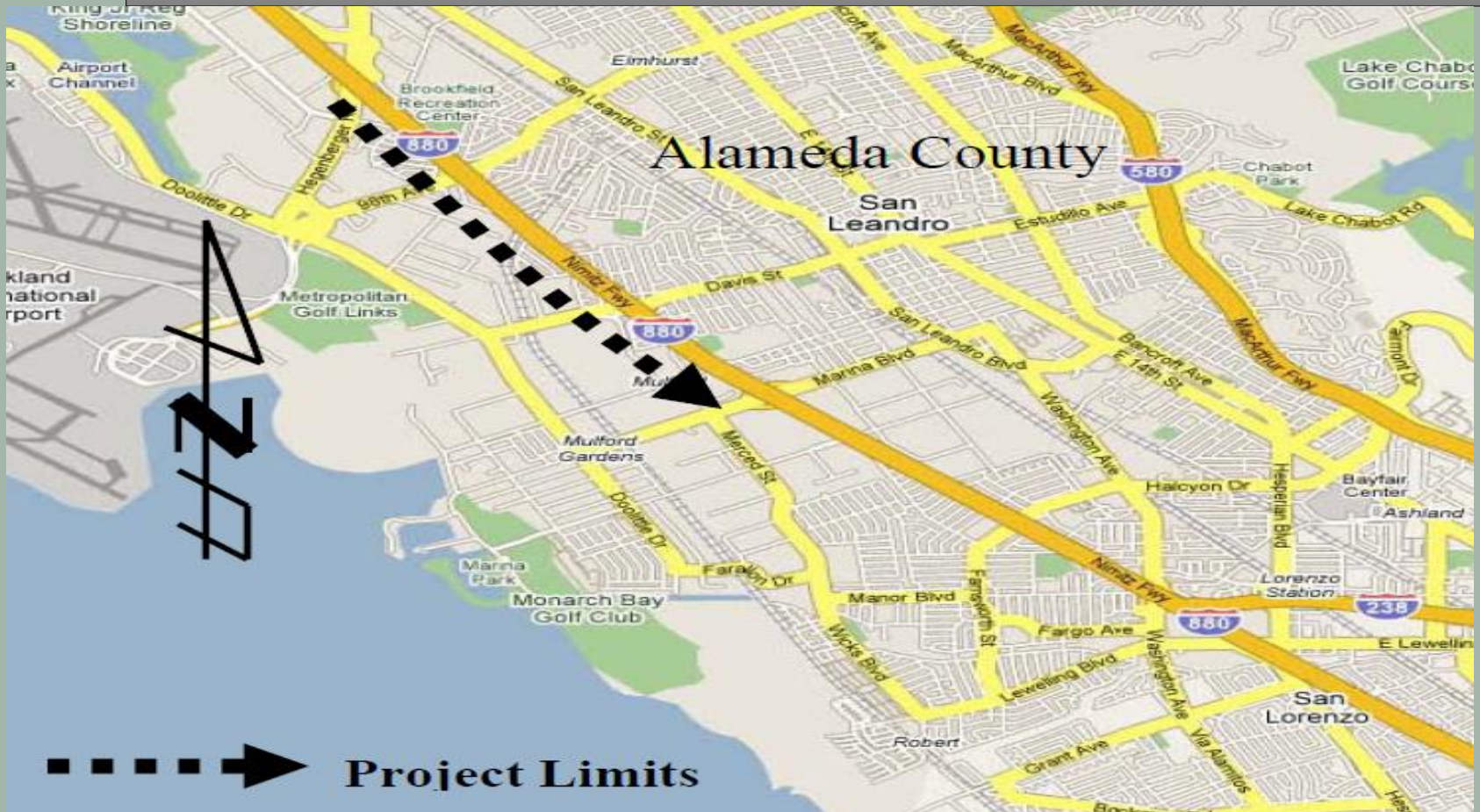


I-880 Operational and Safety Improvement at 29th and 23rd Ave - Contract 04-0A7104

All information presented here is an estimate; it is preliminary and subject to change.



SB I-880 HOV LANE



04-3A9214 Ala-880 PM 22.6/24.0

Estimate: \$ 45,000,000

Adv: 6/18/12 Bids Open: 8/22/12

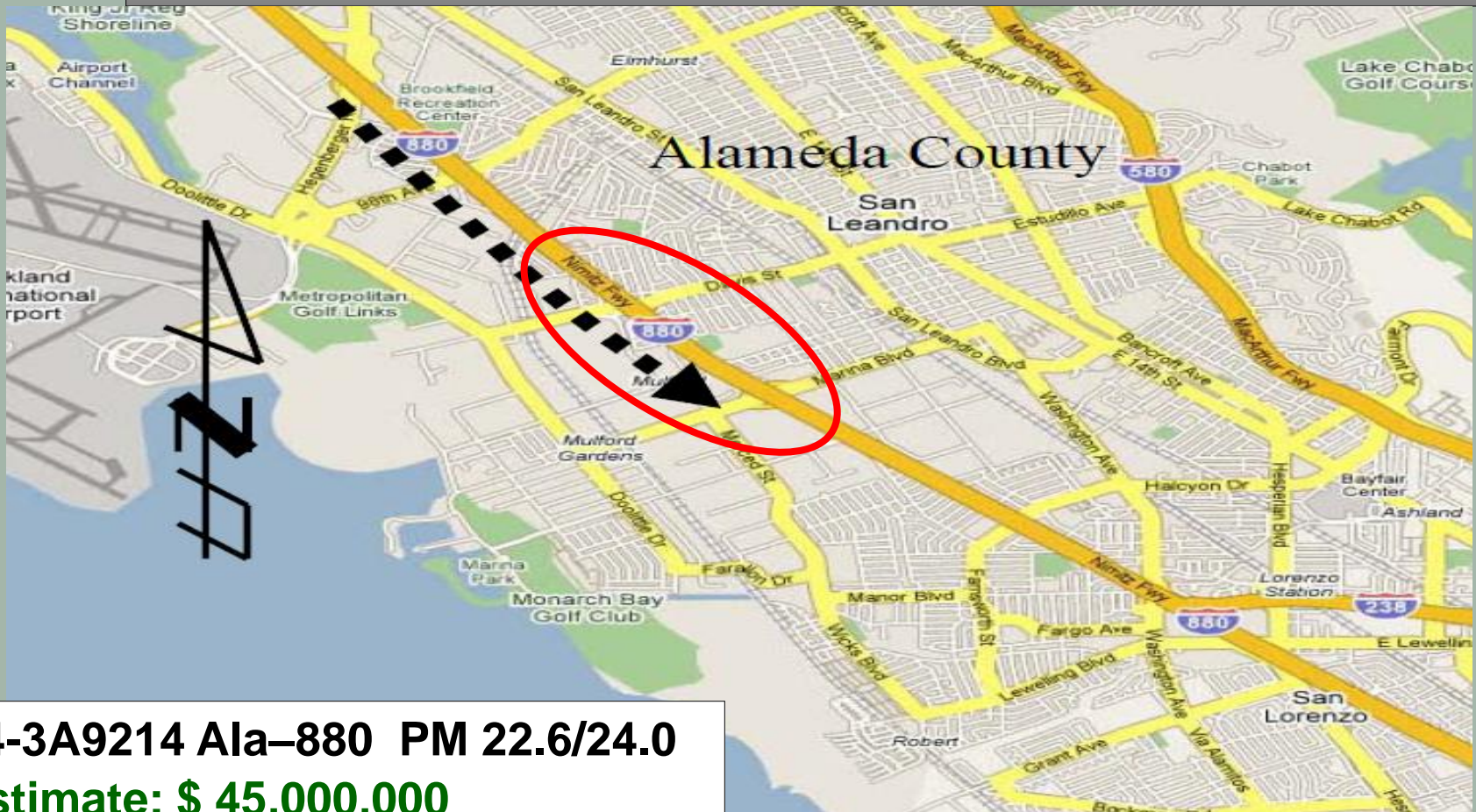
04-3A9224 Ala-880 PM 24.0/25.5

Estimate: \$ 24,100,000

Adv: 6/25/12 Bids Open: 8/28/12



SB I-880 HOV LANE SOUTH SEGMENT



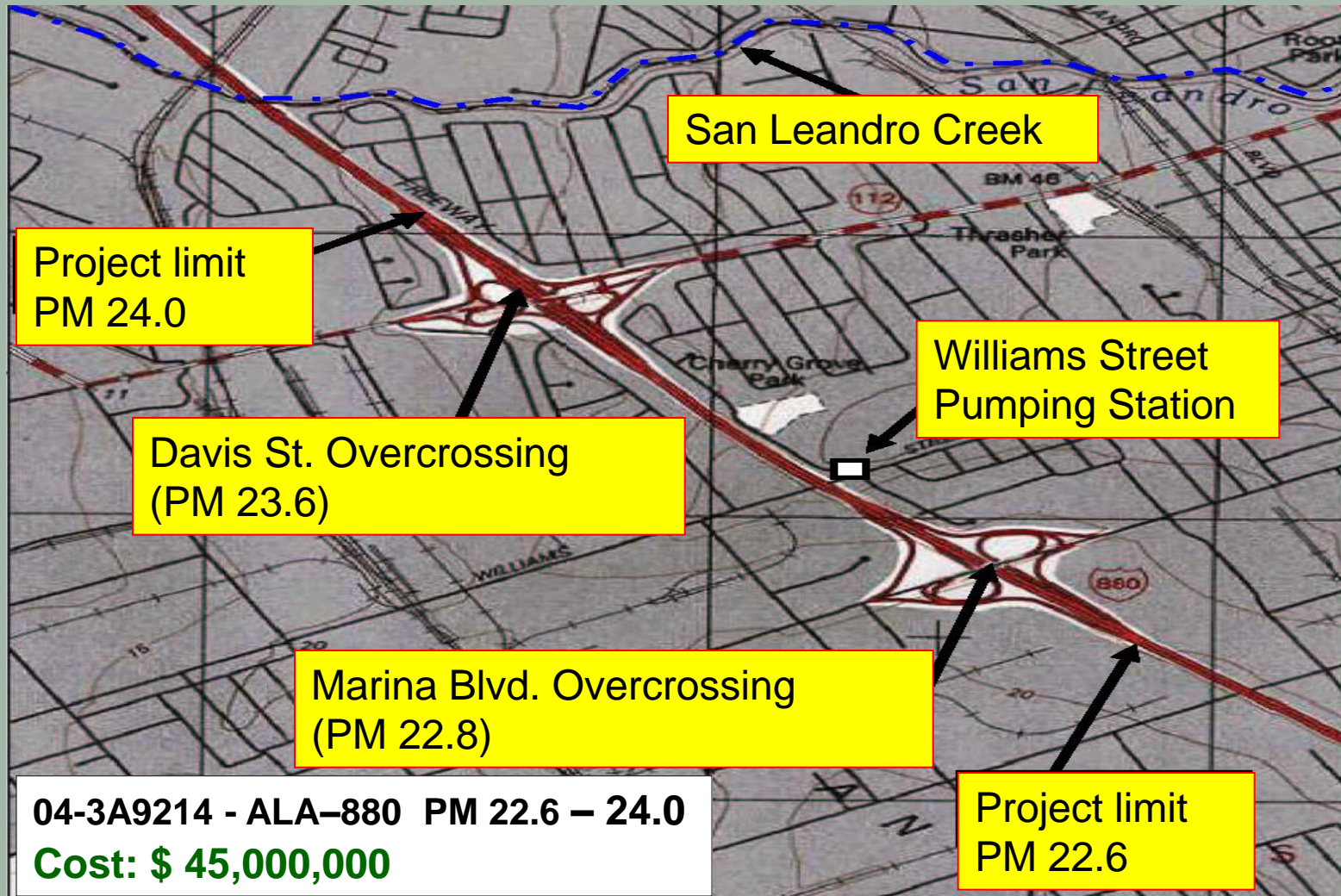
04-3A9214 Ala-880 PM 22.6/24.0

Estimate: \$ 45,000,000

Adv: 6/18/12 Bids Open: 8/22/12



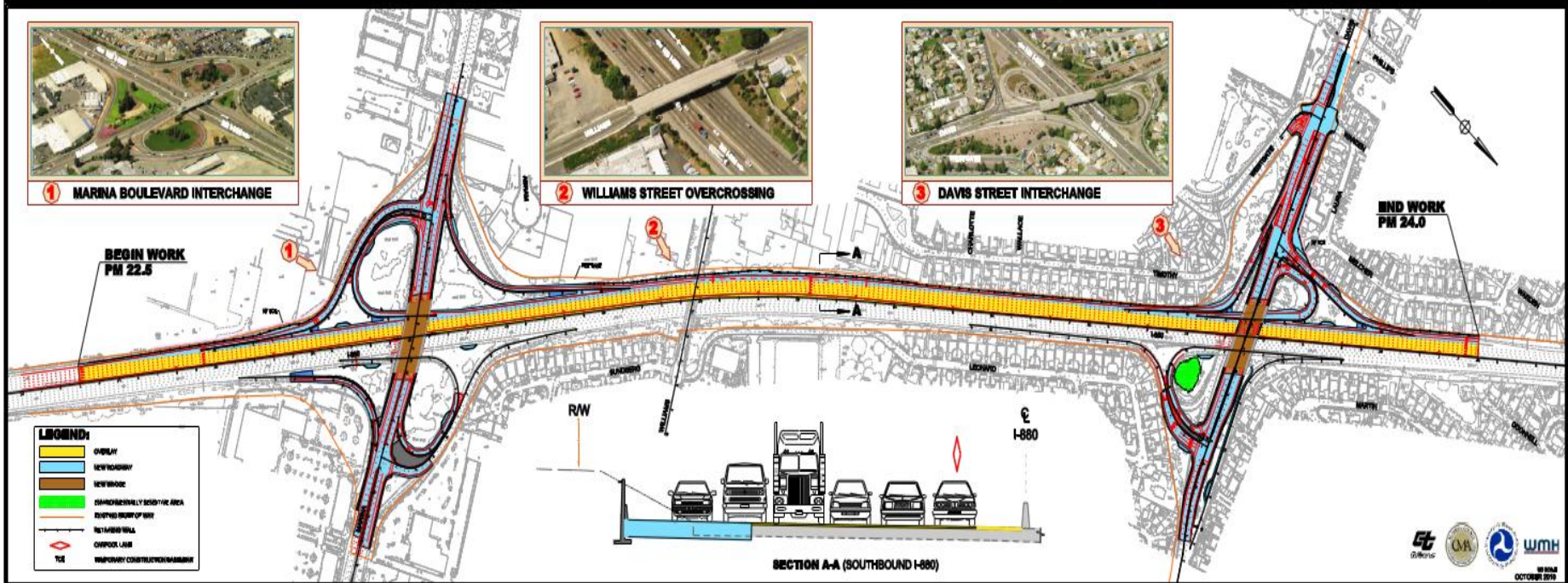
CONSTRUCT SB HOV LANE (South Segment)





I-880 SB HOV Lane South Segment

I-880 SOUTHBOUND HOV LANE PROJECT (MARINA TO DAVIS)





I-880 SB HOV Lane

South Segment Roadway work

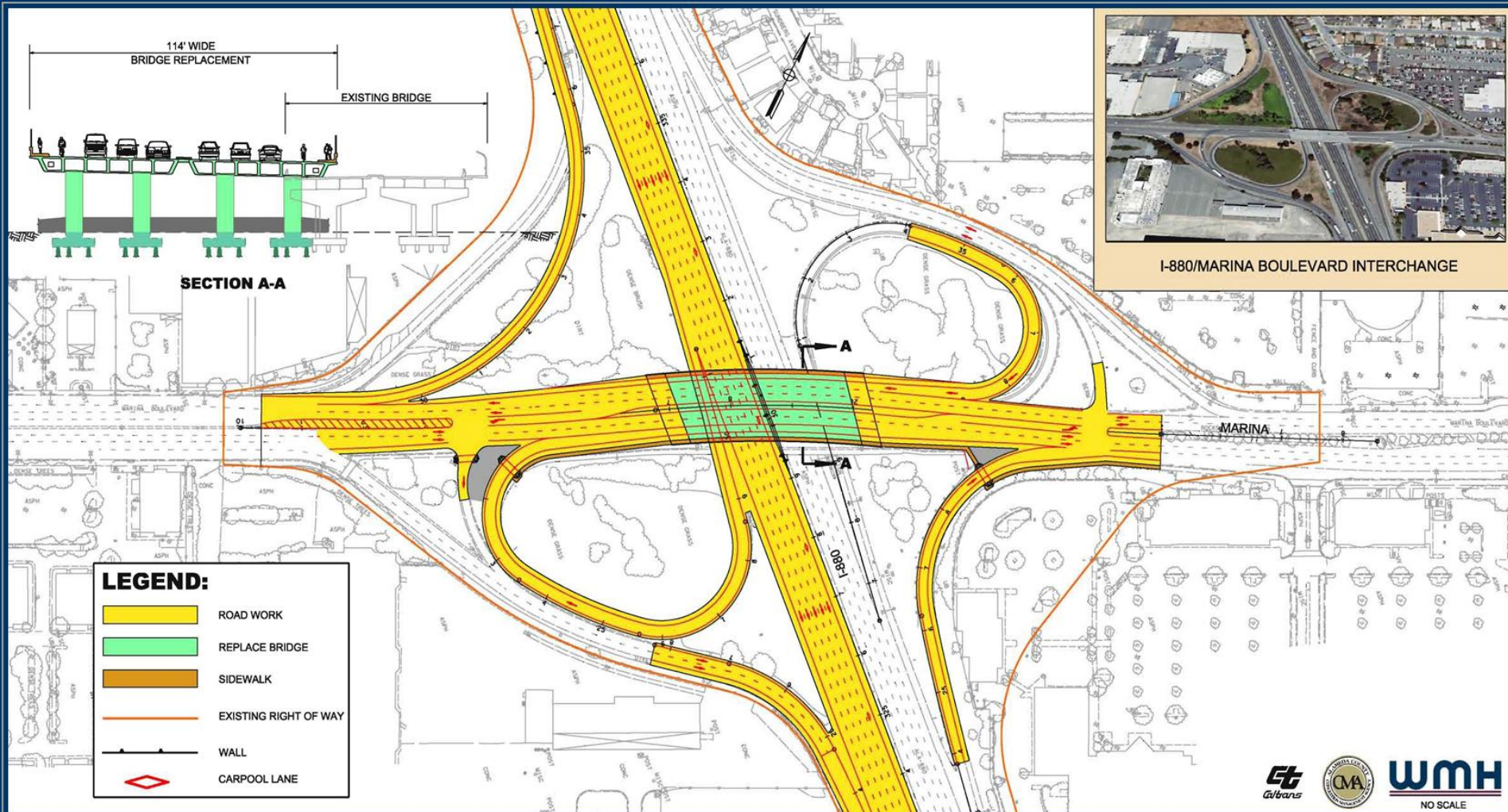
- ◆ Add SB HOV Lane from 0.3 Miles South of Marina Blvd. OC to 0.3 Miles North of Davis Street OC
- ◆ Outside Widening to Accommodate HOV Lane
- ◆ Reconstruct, Widen and Raise Overcrossings
- ◆ Reconstruct Marina Blvd. & Davis St. Interchanges
- ◆ Construct Over 3,000' Retaining Walls (Standard Type)
- ◆ Reconstruct portion Davis St. Sound Wall
- ◆ Install Sanitary Sewer Pipe lining and other Sewer Facilities
- ◆ Jacking Pipes and Install Drainage Box Culverts
- ◆ SB I-880 Pavement Overlay/Median Shoulder Rehabilitation
- ◆ New overcrossings with CIP/PS Box Girder Superstructure and Driven Steel Pile Foundations
- ◆ Install Lighting, Traffic Signals, Fiber Optic System, Overhead Sign Structures and TOS Elements and Utility Joint Trench and Conduits

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I-880 SB HOV Lane

South Segment (Marina Blvd)

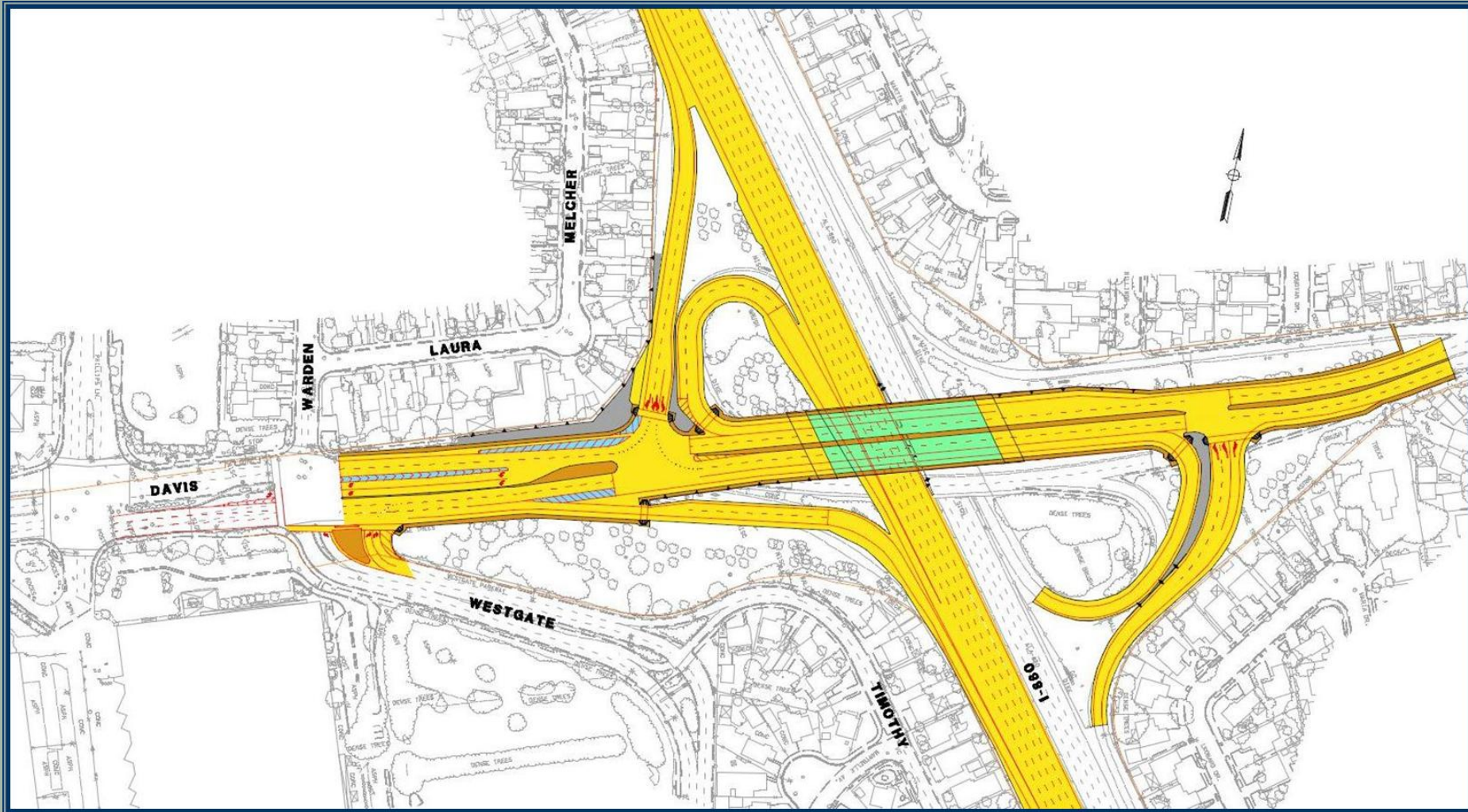


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I-880 SB HOV Lane

South Segment (Davis St.)

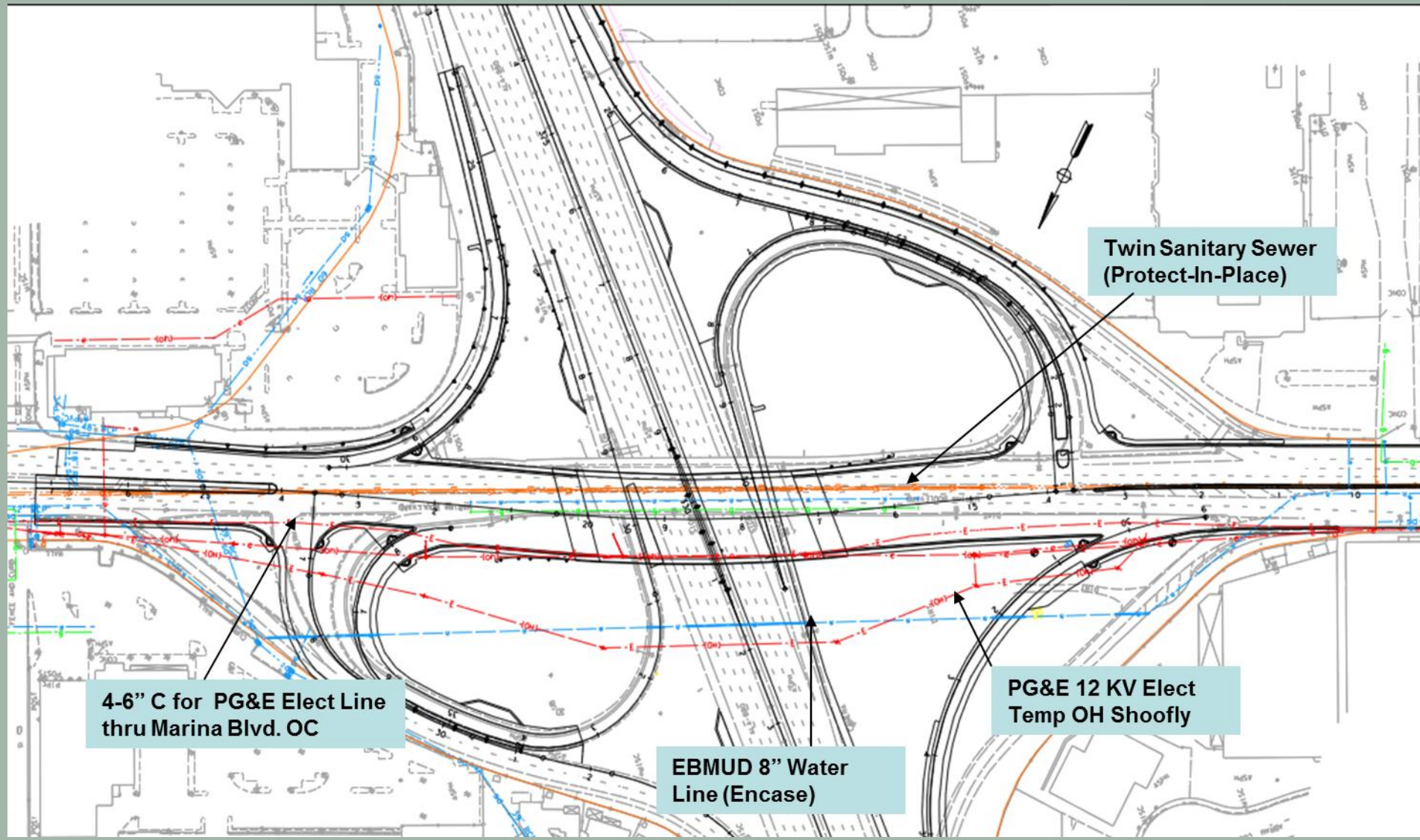


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I-880 SB HOV Lane

South Segment Utility Work (Marina Blvd)



Twin Sanitary Sewer
(Protect-In-Place)

4-6" C for PG&E Elect Line
thru Marina Blvd. OC

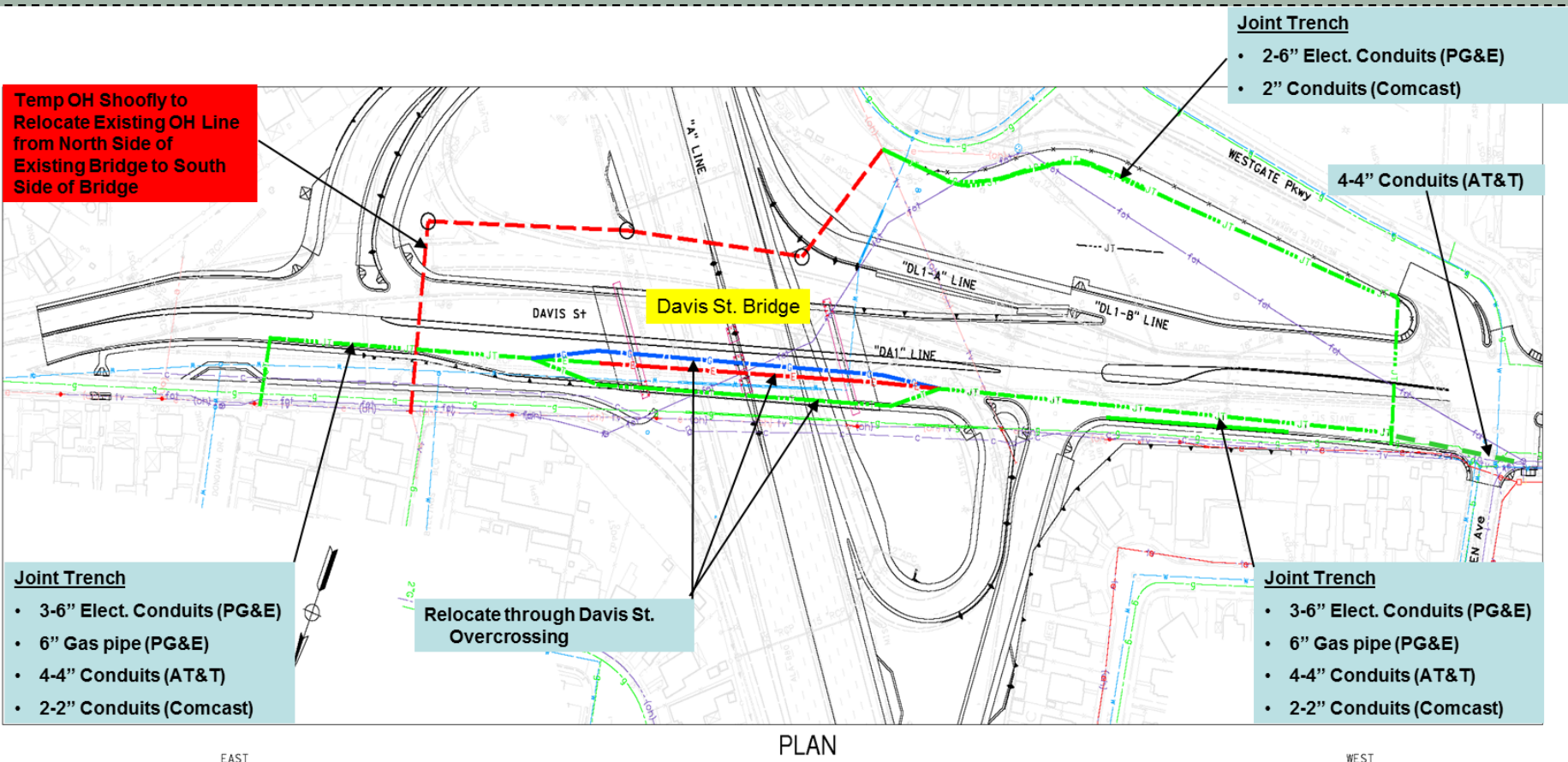
EBMUD 8" Water
Line (Encase)

PG&E 12 KV Elect
Temp OH Shoofly



I-880 SB HOV Lane

South Segment Utility Work (Davis St.)

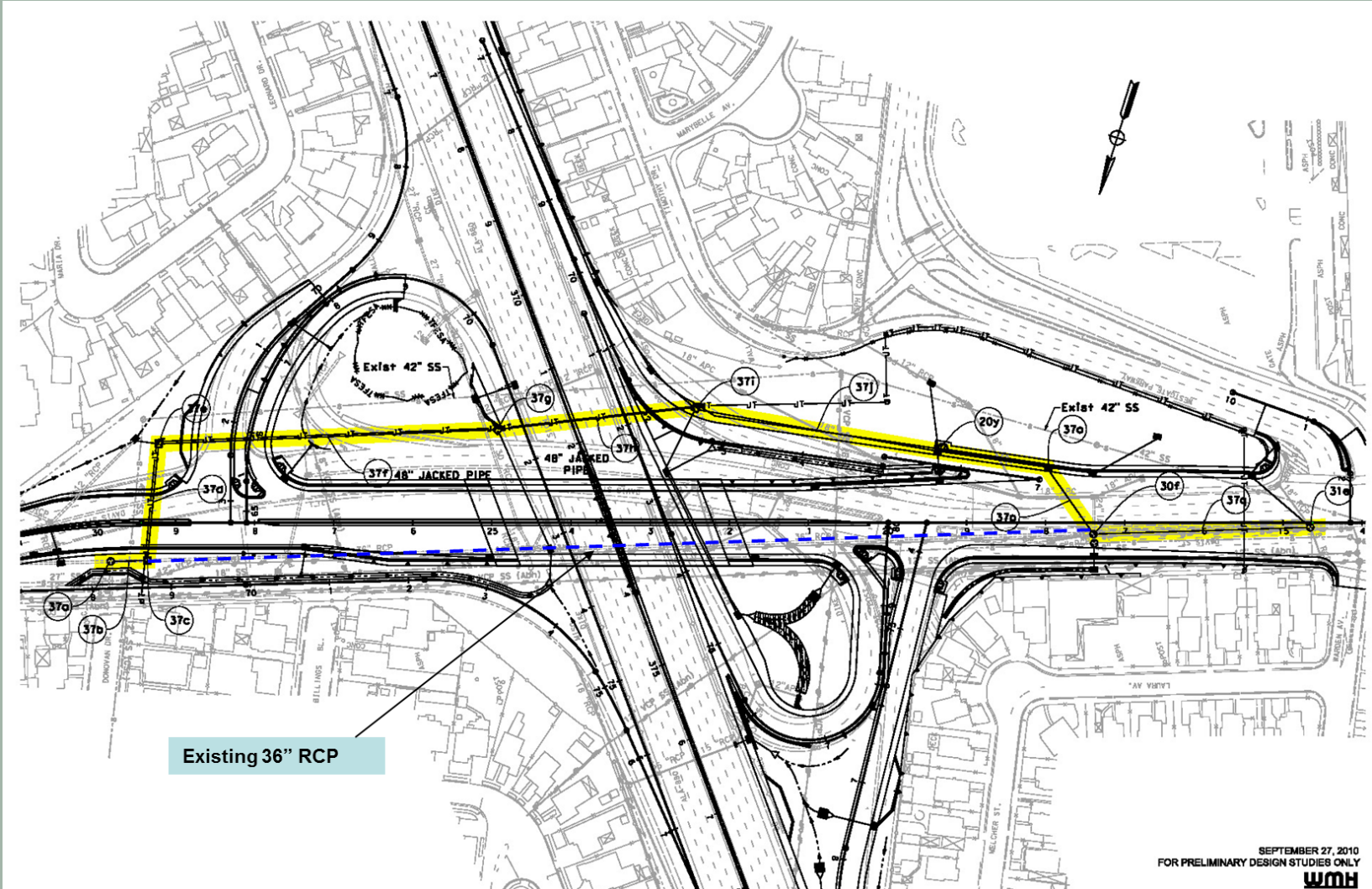


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I-880 SB HOV Lane

South Segment Utility Work (Davis St.)

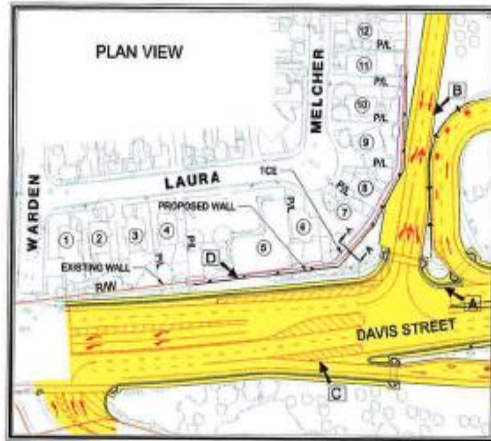


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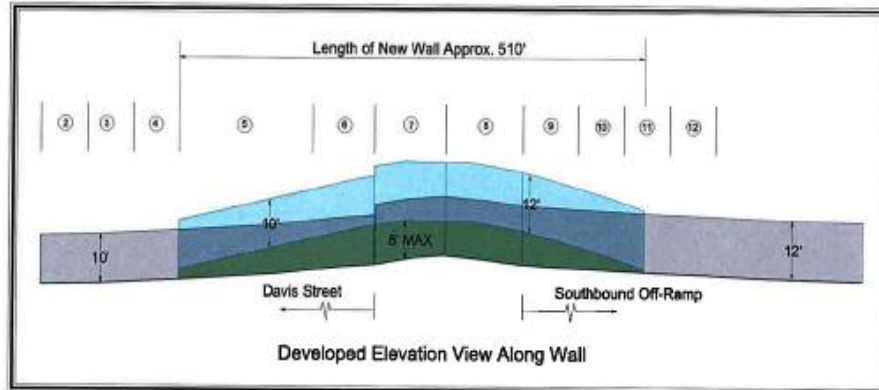
I-880 SB HOV Lane

South Segment (Davis St. Sound Wall)



LEGEND:

- EXISTING SOUND WALL (10' TO 12' HIGH)
- NEW RETAINING WALL (2' TO 8' HIGH)
- NEW MASONRY BLOCK SOUND WALL (10' TO 12' HIGH)
- PROPERTY REFERENCE
- PHOTO LOCATION AND DIRECTION
- TCE TEMPORARY CONSTRUCTION EASEMENT
- R/W STATE RIGHT OF WAY
- PL PROPERTY LINE



EXISTING WALL AT DAVIS/SB OFF-RAMP INTERSECTION



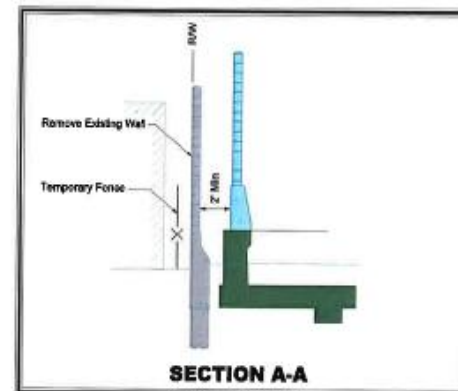
EXISTING WALL AT DAVIS SB OFF-RAMP



EXISTING WALL AT DAVIS



EXAMPLE OF PROXIMITY OF WALL TO BUILDINGS





I-880 SB HOV Lane

South Segment Stage Construction

- ◆ 10 Stages of Construction over 3 years
- ◆ Stagger Interchange Construction
- ◆ Utility Relocation and Bridge Construction are Schedule Critical
- ◆ Build Bridges in Two Halves
- ◆ Maintain Existing Number of Lanes
- ◆ Extensive Nighttime Work
- ◆ Full Freeway and Ramp Closures Required
- ◆ FAA Restrictions on Construction Equipment Heights
- ◆ Noise Control and Vibration Monitoring
- ◆ Work Closely with PG&E, AT&T and Comcast



I-880 SB HOV Lane (South Segment) Construction Schedule

- **Bid Open**
 - » **August 22, 2012**
- **Begin Construction**
 - » **October 2012 (Estimated)**
- **Total Working Days = 840 days**



I-880 SB HOV Lane

Potential Small Business Items of Work

Item No.	Item Description	unit	Estimated Quantity
"A"	FENCE:		
3	TEMPORARY FENCE (CL-6) (VISIBILITY SCREEN)	LF	520
4	TEMPORARY FENCE (TYPE CL-6)	LF	940
5	TEMPORARY FENCE (TYPE ESA)	LF	770
15	TEMPORARY SILT FENCE	LF	16,600
42	REMOVE CHAIN LINK FENCE	LF	1,590
205	CHAIN LINK FENCE (TYPE CL-4, VINYL-CLAD)	LF	2,340
206	CHAIN LINK FENCE (TYPE CL-6)	LF	1,590
207	16' CHAIN LINK GATE (TYPE CL-6)	EA	1

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I-880 SB HOV Lane

Potential Small Business Items of Work

Item No.	Item Description	unit	Estimated Quantity
"B"	TRAFFIC:		
27	CONSTRUCTION AREA SIGNS	LS	1
29	TYPE II BARRICADE	EA	9
	TYPE III BARRICADE	EA	20
31	CHANNELIZER (SURFACE MOUNTED)	EA	1,540
32	PORTABLE CHANGEABLE MESSAGE SIGN	LS	1
34	TEMPORARY CRASH CUSHION MODULE	EA	780
35	TEMPORARY ALTERNATIVE CRASH CUSHION	EA	17

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I-880 SB HOV Lane

Potential Small Business Items of Work

Item No.	Item Description	unit	Estimated Quantity
209	DELINEATOR (CLASS 1	EA	270
210	OBJECT MARKER (TYPE K-1)	EA	10
211	CONCRETE BARRIER MARKER	EA	10
212	METAL BEAM GUARD RAILING	LF	1,640
154	CHAIN LINK RAILING (TYPE 7)	LF	1,341
215	PEDESTRIAN BARRICADE	EA	11
217	TRANSITION RAILING (TYPE WB)	EA	9
218	END CAP	EA	2
219	END ANCHOR ASSEMBLY (TYPE SFT)	EA	6

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I-880 SB HOV Lane

Potential Small Business Items of Work

Item No.	Item Description	unit	Estimated Quantity
221	ALTERNATIVE FLARED TERMINAL SYSTEM	EA	3
235	4" THERMOPLASTIC TRAFFIC STRIPE	LF	42,700
236	6" THERMOPLASTIC TRAFFIC STRIPE	LF	850
237	8" THERMOPLASTIC TRAFFIC STRIPE	LF	9,500
238	8" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 12-3)	LF	1,150
239	THERMOPLASTIC PAVEMENT MARKING	SQFT	660



I-880 SB HOV Lane

Potential Small Business Items of Work

Item No.	Item Description	unit	Estimated Quantity
240	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 36-12)	LF	35,900
241	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 17-7)	LF	6,900
242	PAINT TRAFFIC STRIPE (2-COAT)	LF	208,000
243	PAINT PAVEMENT MARKING (2-COAT)	SQFT	7,420
244	PAVEMENT MARKER (NON-REFLECTIVE)	EA	7,380
245	PAVEMENT MARKER (RETROREFLECTIVE)	EA	7,240



I-880 SB HOV Lane

Potential Small Business Items of Work

Item No.	Item Description	unit	Estimated Quantity
"C"	ROAD WORK:		
43	REMOVE METAL BEAM GUARD RAILING	LF	1,360
56	SALVAGE METAL BRIDGE RAILING	LF	565
38	NOISE MONITORING	LS	1

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I-880 SB HOV Lane

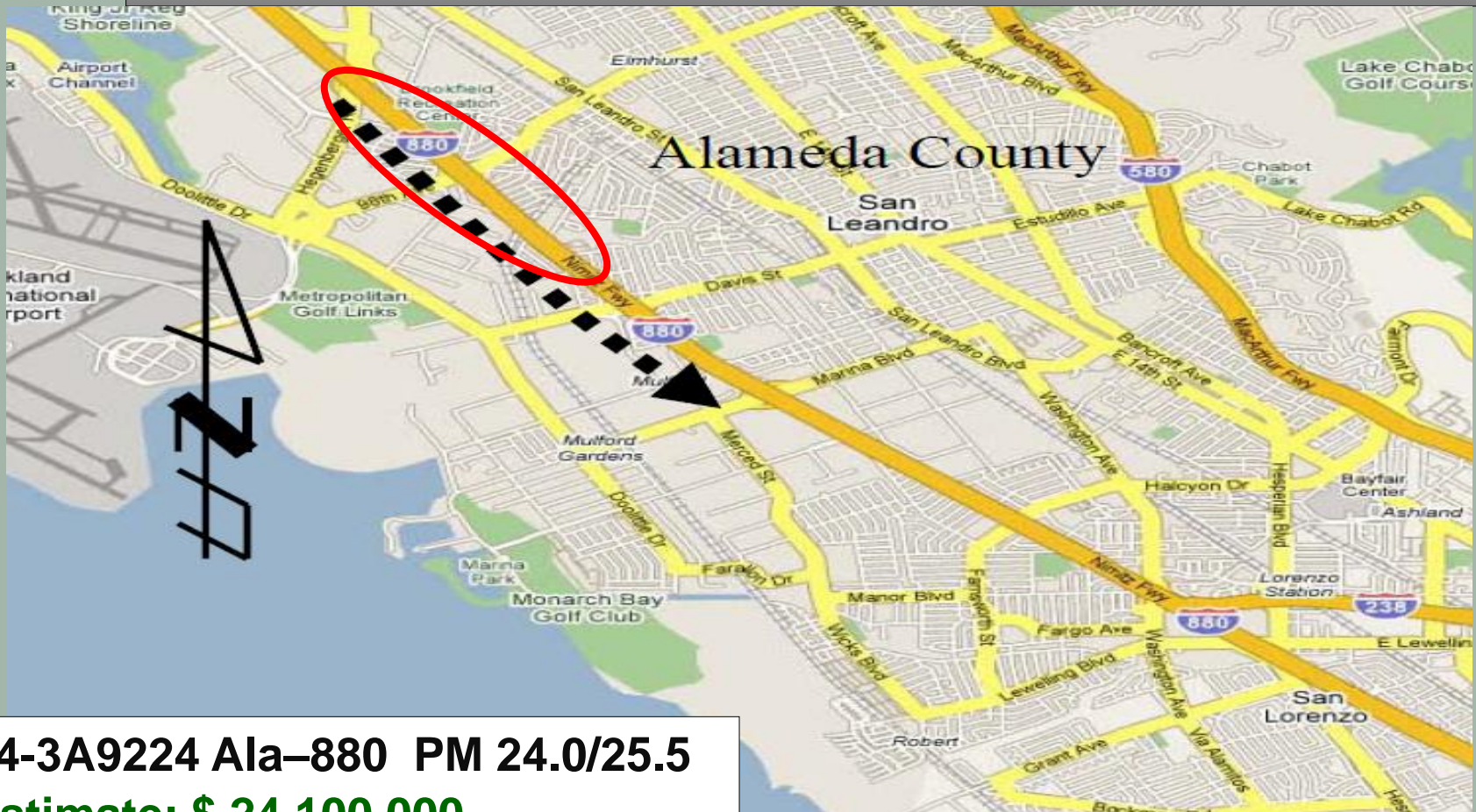
Potential Small Business Items of Work

Item No.	Item Description	unit	Estimated Quantity
"D"	WATER POLLUTION, EROSION AND LANDSCAPING:		
13	PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	1
81	LEAD COMPLIANCE PLAN	LS	1
70	EROSION CONTROL (HYDROSSED)	AC	12
100	ROLLED EROSION CONTROL PRODUCT (NETTING)	SQFT	176,400
97	FIBER ROLLS	LF	40,800
96	EROSION CONTROL (COMPOST BLANKET)	CY	1,570
98	MOVE-IN/MOVE-OUT (EROSION CONTROL)	EA	10

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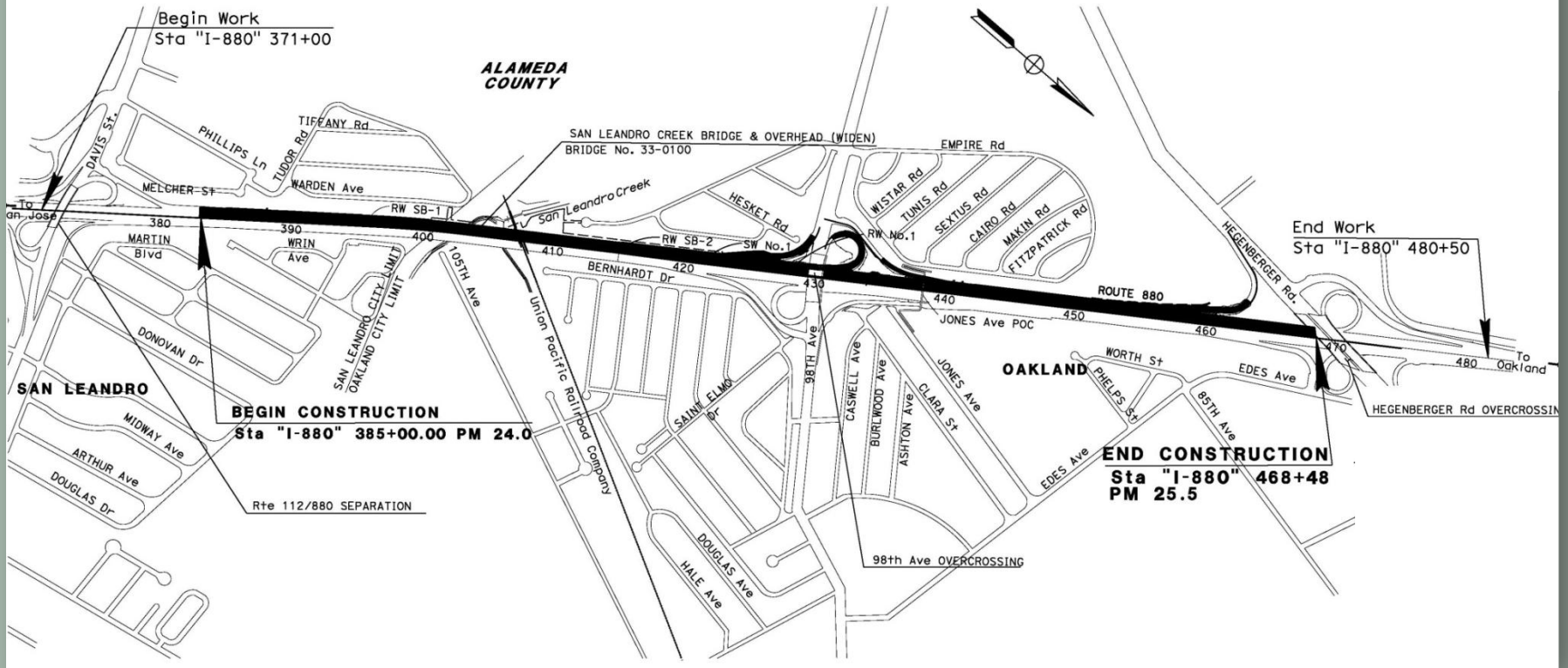
SB I-880 HOV LANE NORTH SEGMENT



04-3A9224 Ala-880 PM 24.0/25.5
Estimate: \$ 24,100,000
Adv: 6/25/12 Bids Open: 8/28/12



North Segment Limits



From 0.2 Miles North of SR 118/I-880 Separation to Hegenberger Road



Major Project Elements

Major Elements:

- Add HOV lane in SB direction from 0.2 miles north of Davis Street Interchange (PM 24.0) to Hegenberger Road Interchange (PM 25.5).
- Widen San Leandro Creek/UPRR OC Bridge.
- Construct soundwalls and retaining walls.
- Reconstruct drainage systems
- Reconstruct Pavement





Design Summary

1) Widening Freeway for HOV Lane

- **Extend the existing southbound high-occupancy vehicle (HOV) lane from its current beginning point approximately 1500 ft. north of the Davis Street Overcrossing to the Hegenberger Road on-ramp.**
- **Width of HOV lane to be 12 feet.**
- **Requires shifting of existing traffic lanes west.**
- **Requires widening of San Leandro Creek/UPRR Bridge**



Typical Sections - Mainline

NOTES:

- DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
- SUPERELEVATIONS ARE SHOWN ON THE SUPERELEVATION DIAGRAMS.
- FOR LOCATION AND TYPE OF HMA DIKE, CONC BARRIER, SEE LAYOUT PLANS.
- FOR LOCATION OF SAWCUT/CONFORM LINES, SEE LAYOUT PLANS.
- FOR LOCATION AND TYPE OF RETAINING WALL, SEE RETAINING WALL PLANS AND STRUCTURE PLANS.
- FOR SOUND WALL LOCATION, SEE SOUND WALL PLANS.
- FOR LOCATION AND ELEVATION OF DITCHES, SEE DRAINAGE PLANS.
- THE HMA-O LAYER FOR WIDEN ROADWAY SECTION SHALL BE PLACED CONCURRENTLY WHEN ROADWAY STRUCTURAL SECTION [2] IS PLACED.
- FOR SIDE SLOPE INFORMATION NOT SHOWN, SEE CONTOUR GRADING PLANS.
- FOR SAFETY SHAPE BARRIER DETAIL, SEE CONSTRUCTION DETAILS PLANS.
- GPI TYPE SHALL BE PAVING MAT.
- SEG SHALL BE CLASS B2.
- FOR ROCK SLOPE PROTECTION SEE DRAINAGE PLANS.

STRUCTURAL SECTIONS

- | | | | |
|---|--|---|---|
| 1 | 0.10' HMA-O
0.15' RHMA-G
0.65' HMA (TYPE A)
0.25' ATPB
0.65' LCB
1.35' CI 4 AS OVER SEG | 7 | 0.10' HMA-O
0.15' RHMA-G
0.65' HMA (TYPE A)
0.25' ATPB
0.65' LCB
1.35' CI 4 AS |
| 2 | 0.10' COLD PLANE AC Pvm+
0.10' HMA-O | 8 | 0.35' HMA (TYPE A)
0.50' CI 2 AB |
| 3 | 0.10' HMA-O
0.15' RHMA-G
0.10' HMA (TYPE A)
0.50' CI 2 AB | | |
| 4 | 0.60' HMA (TYPE A)
0.65' LCB
0.90' CI 4 AS | | |
| 5 | 0.35' Conc Pvm+
0.50' CI 2 AB | | |
| 6 | 0.40' COLD PLANE AC Pvm+
0.10' HMA-O
0.30' HMA (TYPE A) WITH GPI | | |

EXISTING STRUCTURAL SECTIONS

- | | | | |
|---|---|---|--|
| 1 | Exist #4 LANE
0.10' OGAC
0.15' RAC-G
0.65' AC
0.25' ATPB
1.00' CTB
1.55' AS | 4 | Exist RAMP
0.65' AC
0.25' ATPB WITH ED
0.70' AB
1.55' AS |
| 2 | Exist #1, #2, #3 LANE
0.10' OGAC
0.15' RAC-G
0.10' OGAC
Var 0.35'-0.50' AC
0.70' PCC
1.00' AS | 5 | Exist OUTSIDE SHOULDER
0.10' OGAC
0.15' RAC-G
0.65' AC
0.25' ATPB WITH ED
1.00' CTB
1.55' AS |
| 3 | Exist INSIDE SHOULDER
0.10' OGAC
0.15' RAC-G
0.85' AC
0.50' CTB
1.25' AS | | |

ABBREVIATIONS:

GB	GRADE BREAK
RAC-G	RUBBERIZED ASPHALT CONCRETE (TYPE G)
S/C	SAWCUT AND CONFORM
SEG	SUBGRADE ENHANCEMENT GEOTEXTILE
RHMA-G	RUBBERIZED HOT MIXED ASPHALT (GAP GRADED)
HMA-O	HOT MIX ASPHALT OPEN GRADED FRICTION COURSE
GPI	GEOSYNTHETIC PAVEMENT INTERLAYER
MVP	MAINTENANCE VEHICLE PULLOUT

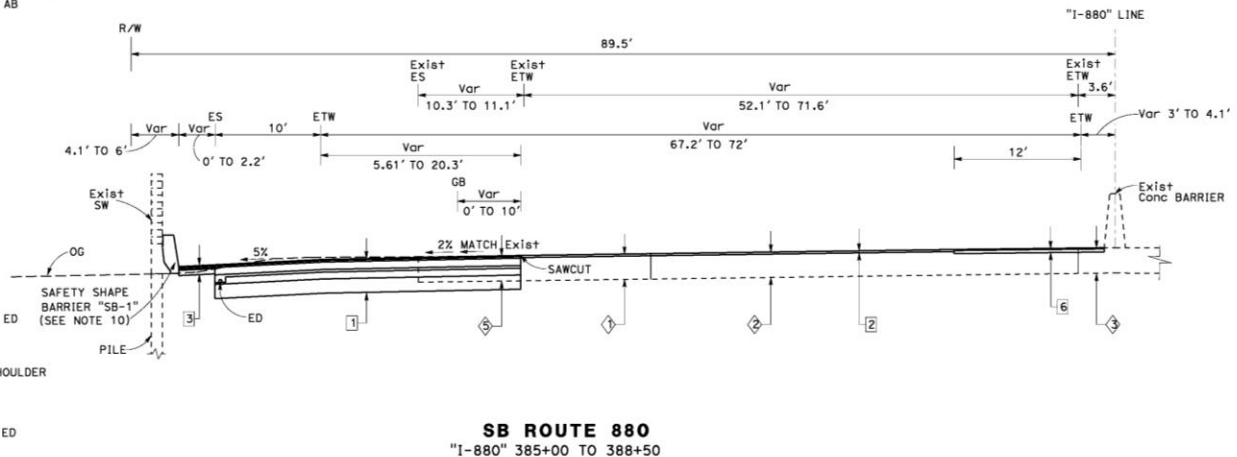
LEGEND:

- [No.] - NEW STRUCTURAL SECTION NUMBER
 (No.) - EXISTING STRUCTURAL SECTION NUMBER

DESIGN DESIGNATION (ROUTE 880)

ADT (2012)	237,600	D	52%
ADT (2035)	263,700	T	8.7%
DHV	8,500	V	80 mph
ESAL	128,000,000	T ₂₀	15.0

Dist	COUNTY	ROUTE	POST MILES	SHEET TOTAL
04	Alc	880	24.0/25.5	No. SHEETS
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE			DATE	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.				
RAJAPPAN & MEYER CONSULTING ENGINEERS INC. 1038 LEIGH AVE. SUITE 100 SAN JOSE, CA 95126			ALAMEDA COUNTY TRANSPORTATION COMMISSION 1333 BROADWAY, SUITE 220 OAKLAND, CA 94612	



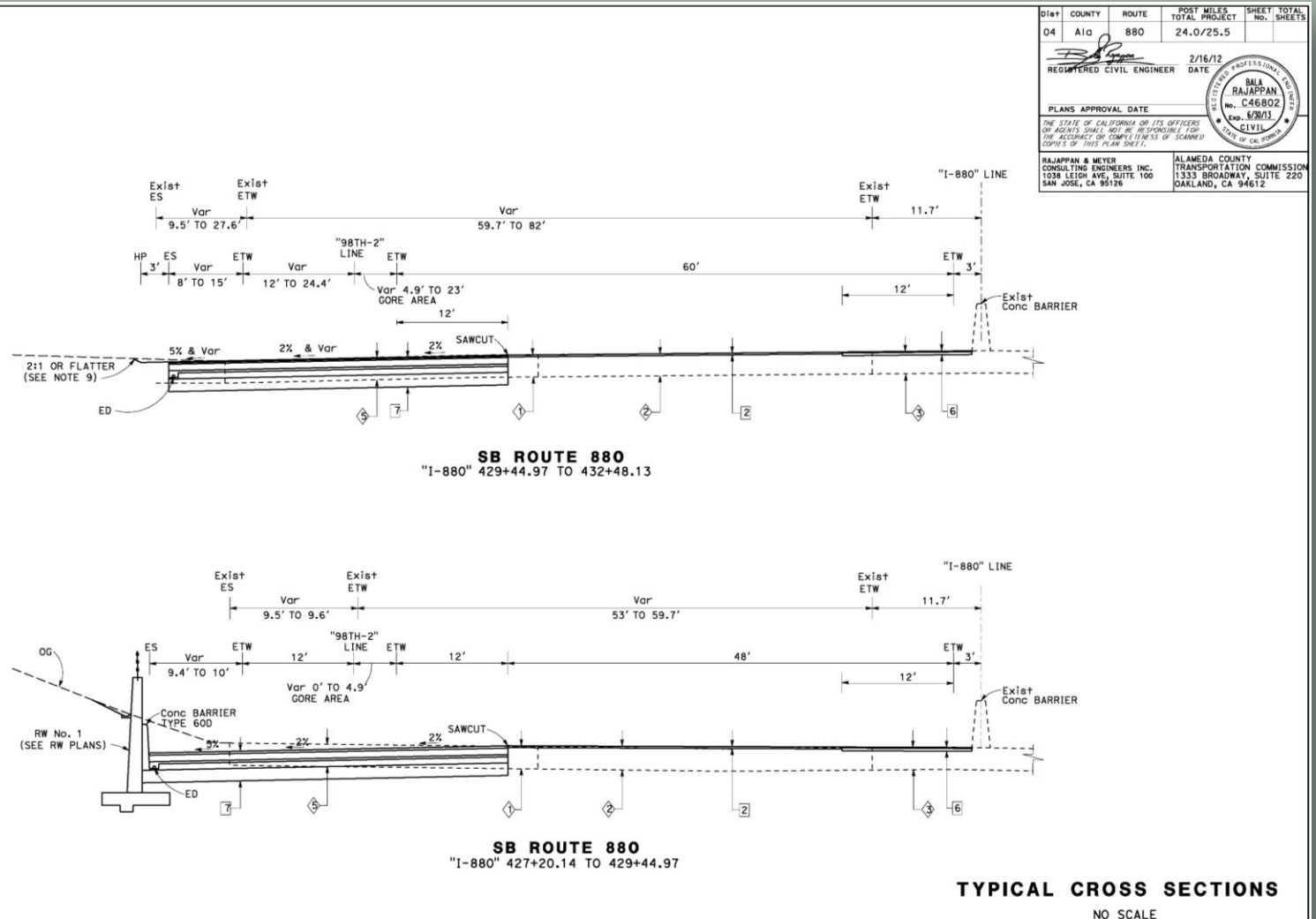
TYPICAL CROSS SECTIONS

NO SCALE

X-1



Typical Sections - Mainline



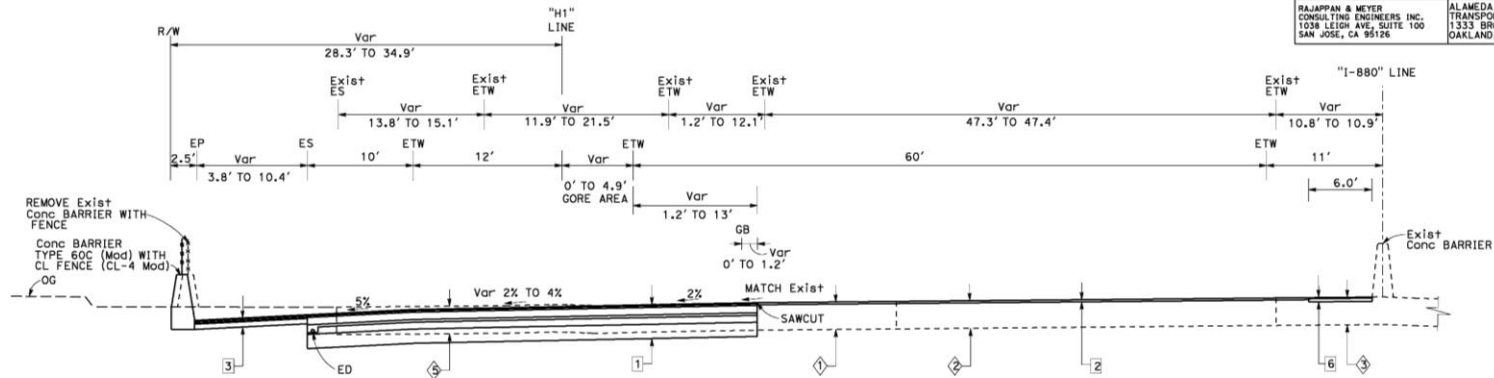
FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET X-1

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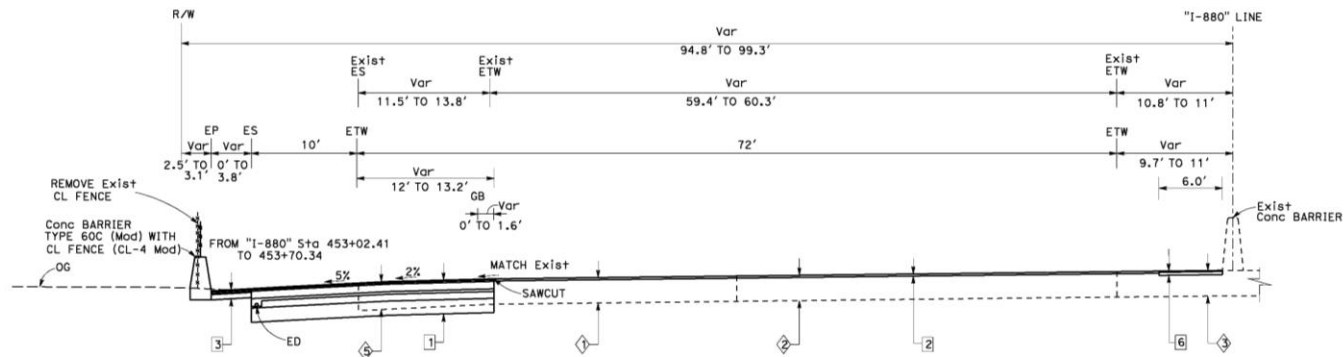


Typical Sections - Mainline

Dist	COUNTY	ROUTE	POST MILES	SHEET TOTAL
04	Ala	880	24.0/25.5	NO. SHEETS
REGISTERED CIVIL ENGINEER			DATE	2/16/12
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>				
RAJAPPAN & MEYER CONSULTING ENGINEERS INC. 1038 LEIGH AVE, SUITE 100 SAN JOSE, CA 95128			ALAMEDA COUNTY TRANSPORTATION COMMISSION 1333 BROADWAY, SUITE 220 OAKLAND, CA 94612	



SB ROUTE 880
"I-880" 453+70.34 TO 456+17.58



SB ROUTE 880
"I-880" 451+15.67 TO 453+70.34

TYPICAL CROSS SECTIONS

NO SCALE

X-9

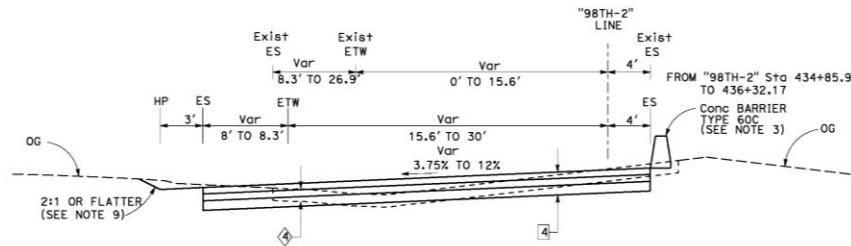
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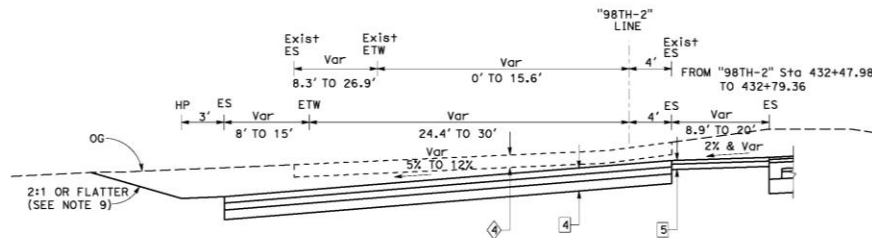


Typical Sections - Ramps

DIST	COUNTY	ROUTE	POST MILES	SHEET TOTAL
04	Alameda	880	24.0/25.5	No. SHEETS
REGISTERED CIVIL ENGINEER			DATE	2/16/12
PLANS APPROVAL DATE				
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RAJAPPAN & MEYER CONSULTING ENGINEERS INC. 1038 LEIGH AVE, SUITE 100 SAN JOSE, CA 95126			ALAMEDA COUNTY TRANSPORTATION COMMISSION 1333 BROADWAY, SUITE 220 OAKLAND, CA 94612	



SB 98TH Ave LOOP ON-RAMP
"98TH-2" 434+85.95 TO 438+04.20



SB 98TH Ave LOOP ON-RAMP
"98TH-2" 432+48.13 TO 434+85.95

TYPICAL CROSS SECTIONS

NO SCALE

X-13

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET X-1

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Pavement Structural Section

Pavement Section

- **Mainline Widening Matches Existing**
- **20-Year Design Life**
- **TI=15 (Mainline)**
- **TI=12 (Ramp and Cross Street)**
- **Replace Edge Drains**
- **Rehabilitation of Median Shoulder**
- **0.1' OGFC Overlay (Aesthetic)**



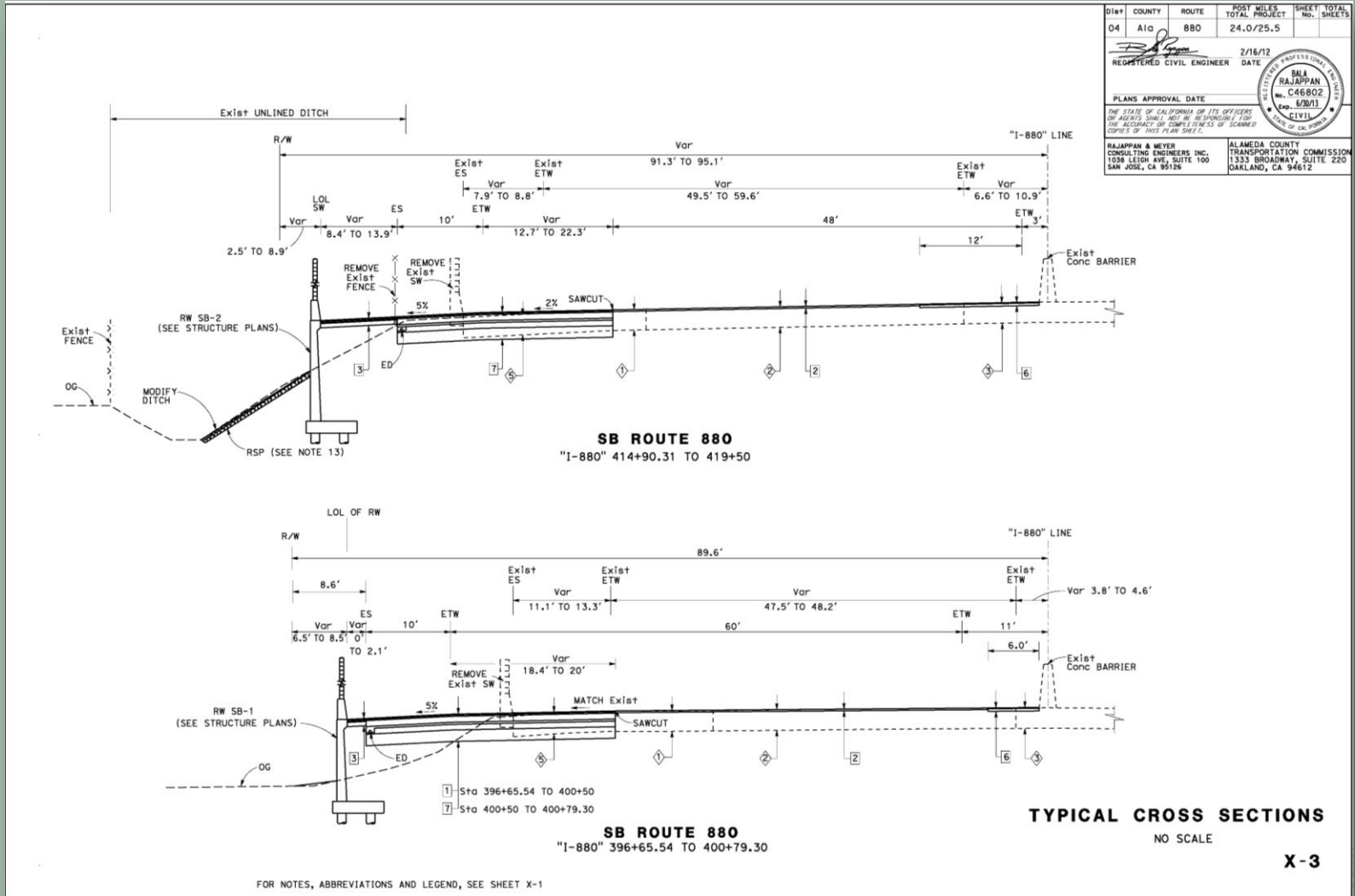
Design Summary

3) Retaining Walls

- Soundwalls north and south of the San Leandro Creek/UPRR bridge will be constructed on retaining walls.



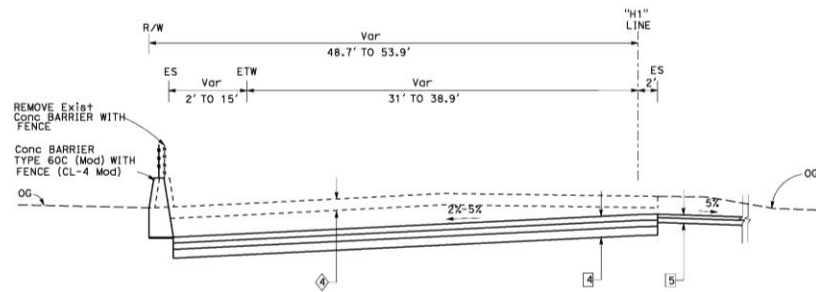
Retaining Walls



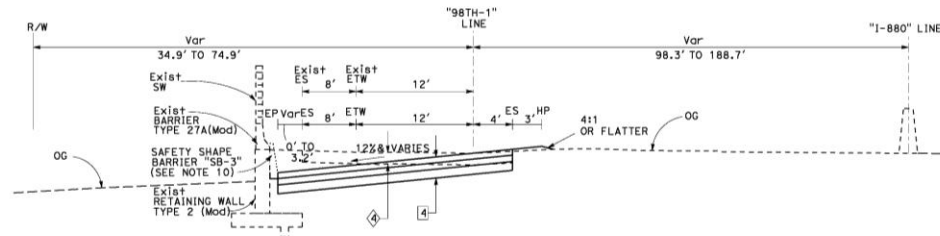
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Retaining Walls



SB HEGENBERGER Rd ON-RAMP
"H1" 459+55.81 TO 460+74.47



SB 98TH Ave OFF-RAMP
"98TH-1" 434+70.61 TO 437+02.62

TYPICAL CROSS SECTIONS

NO SCALE

X-14

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET X-1

DIST	COUNTY	ROUTE	POST MILES	SHEET TOTAL
04	Alameda	880	24.0/25.5	NO. SHEETS
REGISTERED CIVIL ENGINEER			DATE	2/16/12
PLANS APPROVAL DATE			BALA RAJAPPAN No. C46802 Exp. 5/2011 CIVIL STATE OF CALIFORNIA	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.			ALAMEDA COUNTY TRANSPORTATION COMMISSION 1333 BROADWAY, SUITE 220 OAKLAND, CA 94612	
RAJAPPAN & MEYER CONSULTING ENGINEERS INC. 1038 LEON AVE, SUITE 100 SAN JOSE, CA 95128				



Design Summary

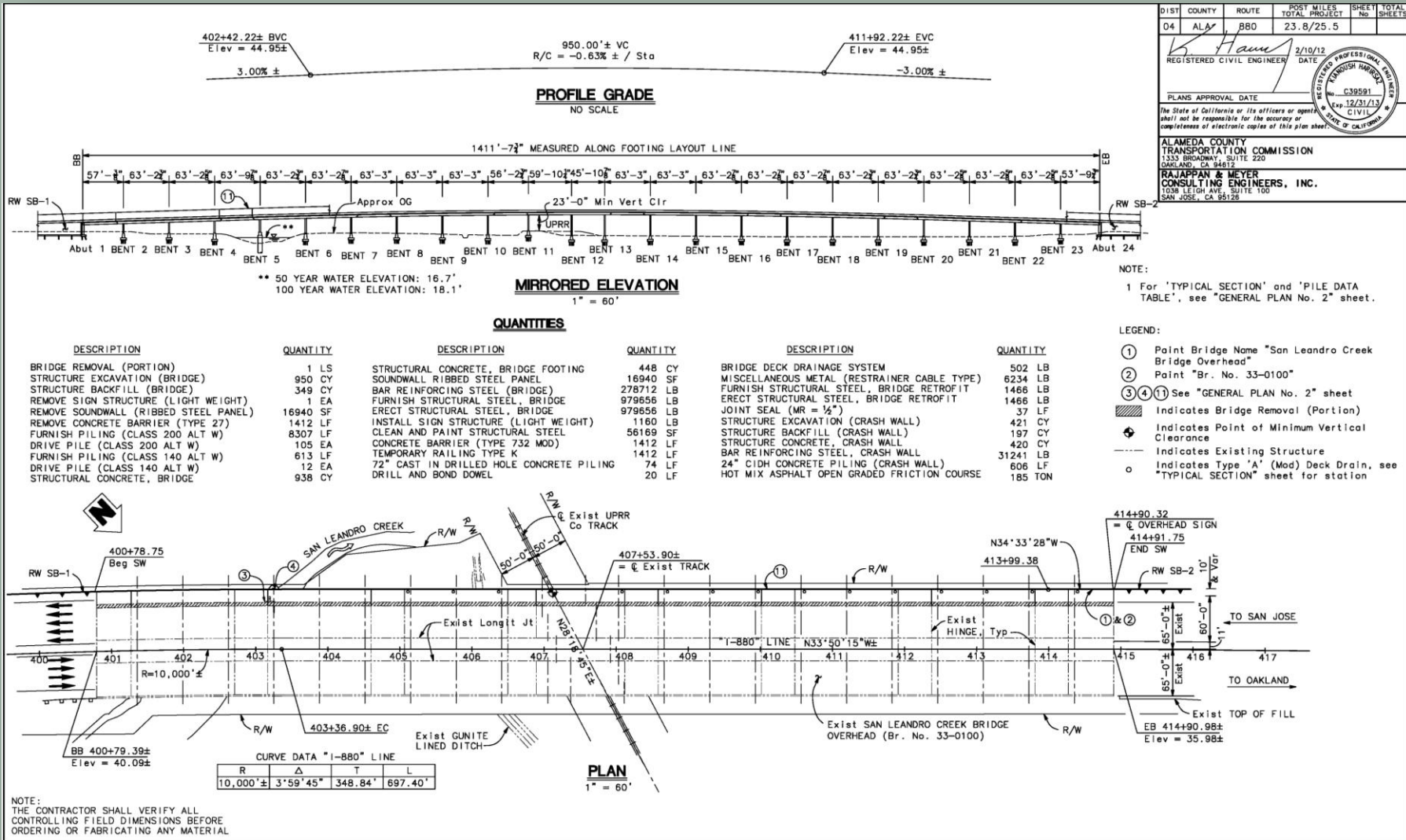
2) Widen San Leandro Creek/UPRR Bridge

- On SB side, bridge will be widened from the existing width of 65 ft up to a maximum completed width of 82.6 ft from the center.
- Seismic retrofit of northbound bridge.
- Length of bridge is 0.27 mile (1,411 ft).
- Structure type is structural steel I-girder.
- Soundwalls located on the bridge will be removed and reconstructed.
- New crash walls will be installed on bents adjacent to UPRR tracks
- Must maintain existing horizontal and vertical clearance from tracks, per UPRR.

All information presented here is an estimate; it is preliminary and subject to change.



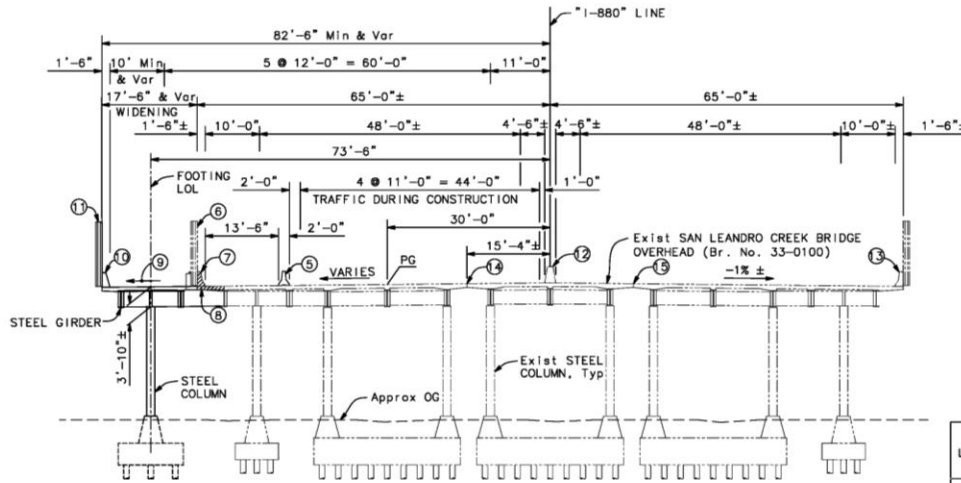
San Leandro Creek Bridge - GP



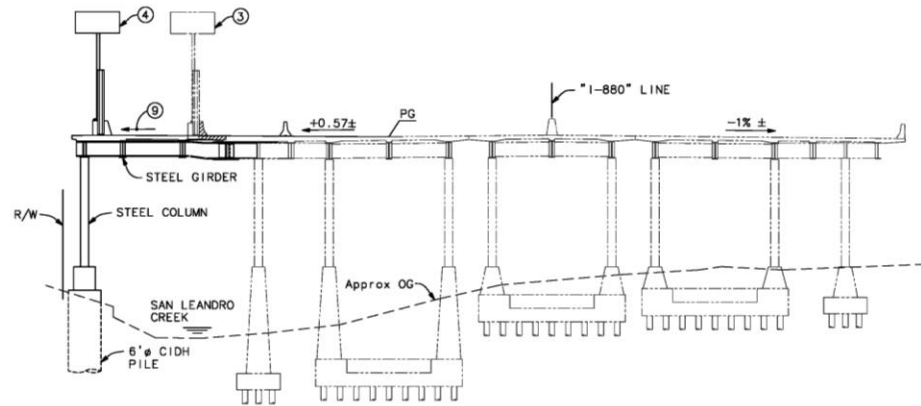
All information presented here is an estimate; it is preliminary and subject to change.



San Leandro Creek Bridge - Section



TYPICAL SECTION
NO SCALE



NOTE: For details not shown, see 'TYPICAL SECTION'

SECTION AT BENT 5
NO SCALE

NOTE:
THE CONTRACTOR SHALL VERIFY ALL
CONTROLLING FIELD DIMENSIONS BEFORE
ORDERING OR FABRICATING ANY MATERIAL

LEGEND:

- ① See "GENERAL PLAN No. 1" Sheet
 - ② Remove Existing Overhead Sign - Lightweight
 - ③ Construct Overhead Sign - Lightweight
 - ④ For location, see "SIGN PEDESTAL DETAILS" sheet
 - ⑤ Temporary Railing Type K, see "ROAD PLANS"
 - ⑥ Remove Existing Ribbed Steel Panel Soundwall
 - ⑦ Remove Existing Concrete Barrier Type 27
 - ⑧ Remove Existing Overhang (Portion)
 - ⑨ Match Existing Structure Cross Slope and Profile Grade
 - ⑩ Concrete Barrier Type 732 (Mod)
 - ⑪ Ribbed Steel Panel Soundwall
 - ⑫ Existing Concrete Barrier Type 60A
 - ⑬ Existing Concrete Barrier Type 27
 - ⑭ Existing Left Longitudinal Joint
 - ⑮ Existing Right Longitudinal Joint
- ▨ Indicates Bridge Removal (Portion)
— Indicates Existing Structure

PILE DATA TABLE

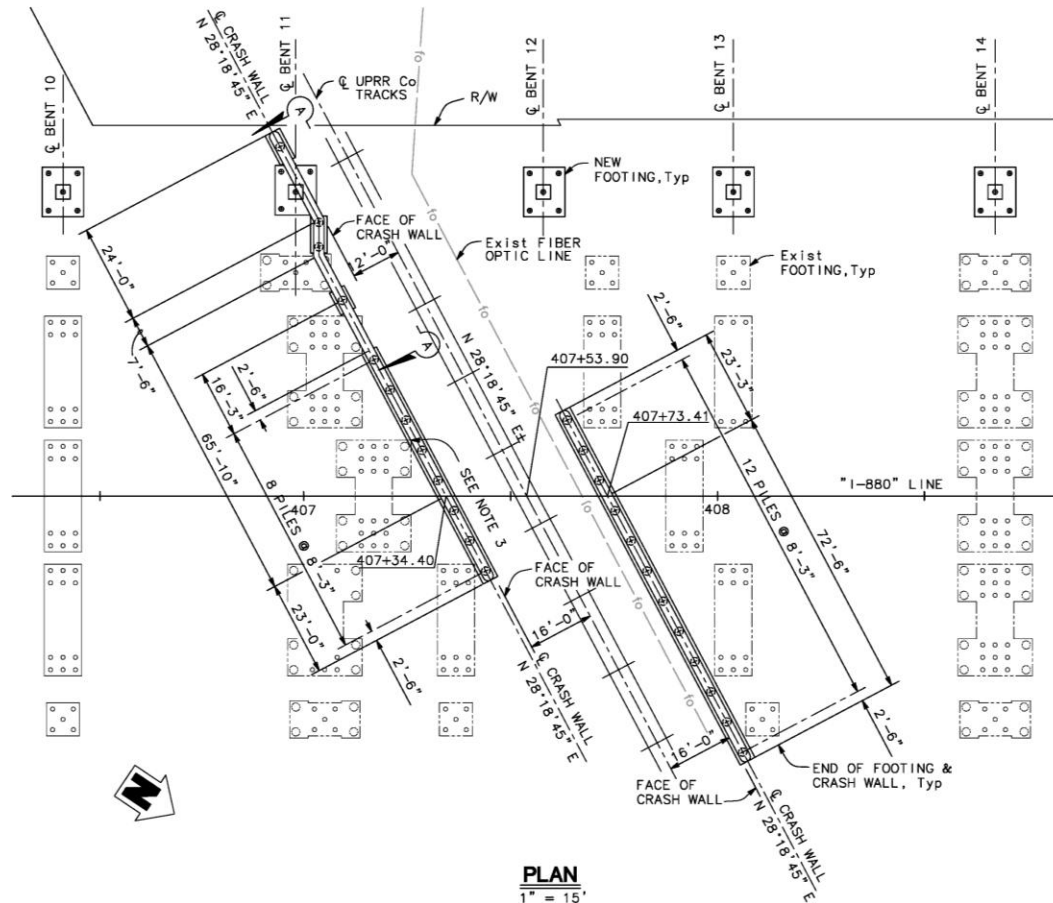
LOCATION	PILE TYPE	NOMINAL RESISTANCE (KIPS)		DESIGN TIP ELEVATION (FEET)	SPECIFIED TIP ELEVATION (FEET)	NOMINAL DRIVING RESISTANCE (KIPS)
		COMPRESSION	TENSION			
Abut 1	Alt "W" CLASS 140	130	0	-23.0(a); -8.0(d)	-23.0	130
BENT 2	Alt "W" CLASS 200	370	200	-63.5(a); -39.5(b); -16.5(d)	-63.5	370
BENT 3	Alt "W" CLASS 200	370	200	-63.5(a); -39.5(b); -16.5(d)	-63.5	370
BENT 4	Alt "W" CLASS 200	370	200	-63.5(a); -39.5(b); -16.5(d)	-63.5	370
BENT 5	6'± CIDH	790	0	-54.5(a); -51.5(d)	-54.5	N/A
BENT 6	Alt "W" CLASS 200	370	200	-63.5(a); -38.5(b); -16.5(d)	-63.5	370
BENT 7	Alt "W" CLASS 200	370	200	-63.5(a); -38.5(b); -16.5(d)	-63.5	370
BENT 8	Alt "W" CLASS 200	370	200	-63.5(a); -38.5(b); -16.5(d)	-63.5	370
BENT 9	Alt "W" CLASS 200	370	200	-63.5(a); -38.5(b); -12.0(d)	-63.5	370
BENT 10	Alt "W" CLASS 200	370	200	-63.5(a); -38.5(b); -12.0(d)	-63.5	370
BENT 11	Alt "W" CLASS 200	370	200	-63.5(a); -37.5(b); -17.0(d)	-63.5	370
BENT 12	Alt "W" CLASS 200	370	200	-63.5(a); -37.5(b); -17.0(d)	-63.5	370
BENT 13	Alt "W" CLASS 200	370	200	-63.5(a); -37.5(b); -17.0(d)	-63.5	370
BENT 14	Alt "W" CLASS 200	370	200	-63.5(a); -37.5(b); -17.0(d)	-63.5	370
BENT 15	Alt "W" CLASS 200	370	200	-63.5(a); -37.5(b); -17.0(d)	-63.5	370
BENT 16	Alt "W" CLASS 200	370	200	-70.5(a); -46.5(b); -18.0(d)	-70.5	370
BENT 17	Alt "W" CLASS 200	370	200	-70.5(a); -46.5(b); -18.0(d)	-70.5	370
BENT 18	Alt "W" CLASS 200	370	200	-70.5(a); -46.5(b); -18.0(d)	-70.5	370
BENT 19	Alt "W" CLASS 200	370	200	-70.5(a); -46.5(b); -18.0(d)	-70.5	370
BENT 20	Alt "W" CLASS 200	370	200	-70.5(a); -46.5(b); -18.0(d)	-70.5	370
BENT 21	Alt "W" CLASS 200	370	200	-71.5(a); -47.5(b); -20.5(d)	-71.5	370
BENT 22	Alt "W" CLASS 200	370	200	-71.5(a); -47.5(b); -20.5(d)	-71.5	370
BENT 23	Alt "W" CLASS 200	370	200	-71.5(a); -47.5(b); -20.5(d)	-71.5	370
Abut 24	Alt "W" CLASS 140	130	0	-31.5(a); -14.5(d)	-31.5	130

DESIGN TIP ELEVATIONS FOR ABUTMENT AND BENT ARE CONTROLLED BY (a) COMPRESSION; (b) TENSION; (d) LATERAL LOADS

DIST	COUNTY	ROUTE	POST MILES	SHEET NO.	TOTAL SHEETS
04	ALAM	880	23.8/25.5		
REGISTERED CIVIL ENGINEER			DATE	2/10/12	
PLANS APPROVAL DATE			2/10/12		
<p>ALAMEDA COUNTY TRANSPORTATION COMMISSION 1333 BROADWAY, SUITE 200 OAKLAND, CA 94612</p> <p>RAJAPPAN & MEYER CONSULTING ENGINEERS, INC. 1038 LEIGH AVE., SUITE 100 SAN JOSE, CA 95128</p>					



San Leandro Crk. Bridge – Crash Walls



NOTE:
THE CONTRACTOR SHALL VERIFY ALL
CONTROLLING FIELD DIMENSIONS BEFORE
ORDERING OR FABRICATING ANY MATERIAL

DIST	COUNTY	ROUTE	POST MILES	SHEET TOTAL	TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	ALA	880	23.8	25	5		

B. Ham
 REGISTERED CIVIL ENGINEER DATE 2/10/12

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic version of this plan sheet.

**ALAMEDA COUNTY
 TRANSPORTATION COMMISSION**
 1333 BROADWAY, SUITE 220
 OAKLAND, CA 94612

**RAJAPANN & MEYER
 CONSULTING ENGINEERS, INC.**
 1038 LEIGH AVE, SUITE 100
 SAN JOSE, CA 95128

SEAL: REGISTERED PROFESSIONAL ENGINEER
 CIVIL
 C39591
 EXP. 12/31/15
 STATE OF CALIFORNIA

NOTES:

1. Contractor shall verify all existing utilities before excavation and construction.
2. For 'Typical Section' and 'VIEW A-A', see "CRASH WALL DETAILS No. 1" sheet.
3. Chip off 6" maximum into the existing footing as required.

LEGEND:

- ⊕ Indicates Piles
----- Indicates Existing Structure

All information presented here is an estimate; it is preliminary and subject to change.



Bridge Construction Access

NOTE:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

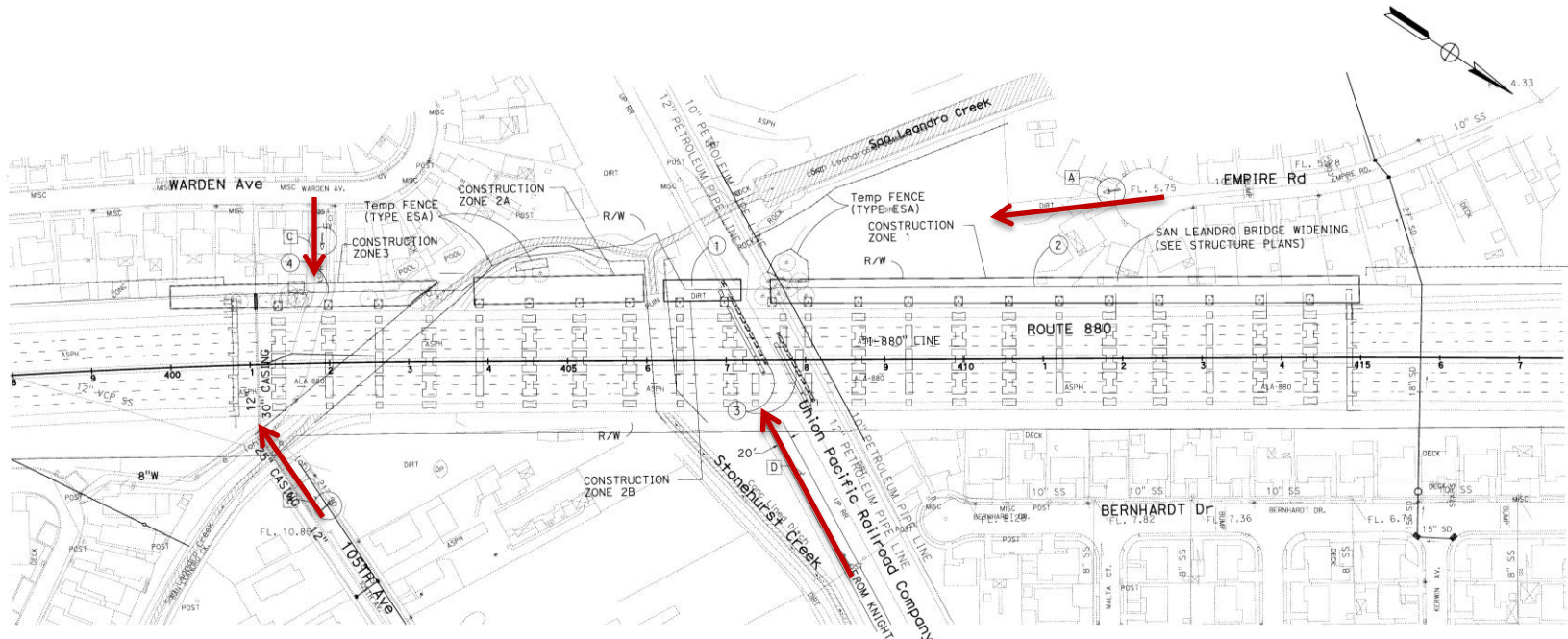
TRAFFIC:

- A ACCESS TO CONSTRUCTION ZONE 1 AND CRASH WALL SHALL BE VIA EMPIRE ROAD.
- B ACCESS TO CONSTRUCTION ZONE 2 SHALL BE VIA 105TH AVE.
- C ACCESS TO CONSTRUCTION ZONE 3 SHALL BE VIA WARDEN AVE.
- D ACCESS TO CONSTRUCTION ZONE 2B SHALL BE VIA KNIGHT ST. AND RIGHT OF ENTRY FROM UPRR.

CONSTRUCTION:

- 1 CONSTRUCT WIDENING OF SAN LEANDRO CREEK BRIDGE IN CONSTRUCTION ZONE 2B (BETWEEN STONEHURST CREEK AND RAILROAD).
- 2 CONSTRUCT WIDENING OF SAN LEANDRO CREEK BRIDGE.
- 3 CONSTRUCT CRASH WALL
- 4 CONSTRUCT UTILITY RELOCATION, SEE UTILITIES PLAN.

DIST	COUNTY	ROUTE	POST MILES	SHEET TOTAL
04	Alameda	880	24.0/25.5	No. SHEETS
REGISTERED CIVIL ENGINEER			DATE	2/16/12
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>				
RAJAPPAN & MEYER CONSULTING ENGINEERS INC. 1038 LEIGH AVE, SUITE 100 SAN JOSE, CA 95128			ALAMEDA COUNTY TRANSPORTATION COMMISSION 1333 BROADWAY, SUITE 220 OAKLAND, CA 94612	



All information presented here is an estimate; it is preliminary and subject to change.



Design Summary

4) Soundwalls

Replacement soundwalls are proposed at the following locations:

Soundwall #	Location	Length (ft)	Height (ft)
RW SB-1	Along SB I-880, south of San Leandro Creek/UPRR bridge	411	14
UPRR Bridge	Along SB I-880, on San Leandro Creek/UPRR bridge	1,437	14
RW SB-2	Along SB I-880, north of San Leandro Creek/UPRR bridge	447	16
1	Along SB I-880, south of 98 th Ave diagonal on-ramp	329	16





Design Summary

4) Ramp Metering Modifications

- 98th Ave SB diagonal on-ramp
- 98th Ave SB loop on-ramp
- Hegenberger Rd SB diagonal on-ramp

5) Other Improvements

- Cold-plane and HMA overlay over existing non-widened sections of SB I-880
- New signs and relocation of existing signs
- Relocate inlets to new edge of shoulder, upsize drainage pipes, including a 24" jacked WSP across I-880
- Highway Planting



Stage Construction

STAGING

- **2 Major Stages of Construction over 1.5 years**
- **Bridge Construction is schedule critical**
- **Maintain existing number of lanes**
- **Night-time freeway lane and ramp closures required – No full freeway closure**
- **Detours for night-time ramp closures**
- **All detours reviewed with the Cities of Oakland and San Leandro**



I-880 SB HOV Lane (North Segment) Construction Schedule

- **Bid Open**
 - » **August 22, 2012**
- **Begin Construction**
 - » **October 2012 (Estimated)**
- **Total Working Days = 625 days**



I-880 SB HOV Lane

Potential Small Business Items of Work

Item No.	Item Description	unit	Estimated Quantity
"A"	FENCE:		
3	TEMPORARY FENCE (CL-6)	LF	440
4	TEMPORARY FENCE (TYPE CL-6) (VISIBILITY SCREEN)	LF	1,900
5	TEMPORARY FENCE (TYPE ESA)	LF	3,560
11	TEMPORARY SILT FENCE	LF	2,600
31	REMOVE CHAIN LINK FENCE	LF	1,590
166	CHAIN LINK FENCE (TYPE CL-4, MOD)	LF	910
167	CHAIN LINK FENCE (TYPE CL-6)	LF	10



I-880 SB HOV Lane

Potential Small Business Items of Work

Item No.	Item Description	unit	Estimated Quantity
“B”	TRAFFIC:		
19	CONSTRUCTION AREA SIGNS	LS	1
21	CHANNELIZER (SURFACE MOUNTED)	EA	100
22	PORTABLE CHANGEABLE MESSAGE SIGN	LS	1
24	TEMPORARY CRASH CUSHION MODULE	EA	270
168	DELINEATOR (CLASS 1)	EA	71
169	GUARD RAILING DELINEATOR	EA	7



I-880 SB HOV Lane

Potential Small Business Items of Work

Item No.	Item Description	unit	Estimated Quantity
170	CONCRETE BARRIER DELINEATOR	EA	11
171	CONCRETE BARRIER MARKER	EA	95
172	OBJECT MARKER	EA	4
173	METAL BEAM GUARD RAILING	LF	250
175	TRANSITION RAILING (TYPE WB)	EA	2
176	END ANCHOR ASSEMBLY (TYPE SFT)	EA	4
177	ALTERNATIVE FLARED TERMINAL SYSTEM	EA	5



I-880 SB HOV Lane

Potential Small Business Items of Work

Item No.	Item Description	unit	Estimated Quantity
185	4" THERMOPLASTIC TRAFFIC STRIPE	LF	33,500
186	8" THERMOPLASTIC TRAFFIC STRIPE	LF	3,900
187	8" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 12-3)	LF	1,010
188	THERMOPLASTIC PAVEMENT MARKING	SQFT	570
189	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 17-7)	LF	1,140



I-880 SB HOV Lane

Potential Small Business Items of Work

Item No.	Item Description	unit	Estimated Quantity
190	PAINT TRAFFIC STRIPE (2-COAT)	LF	78,900
191	PAINT PAVEMENT MARKING (2-COAT)	SQFT	260
192	PAVEMENT MARKER (NON-REFLECTIVE)	EA	5,660
193	PAVEMENT MARKER (RETROREFLECTIVE)	EA	2,800



I-880 SB HOV Lane

Potential Small Business Items of Work

Item No.	Item Description	unit	Estimated Quantity
“C”	ROAD WORK:		
28	NOISE MONITORING	LS	1
32	REMOVE METAL BEAM GUARD RAILING	LF	670



I-880 SB HOV Lane

Potential Small Business Items of Work

Item No.	Item Description	unit	Estimated Quantity
"D"	WATER POLLUTION, EROSION AND LANDSCAPING:		
8	PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	1
59	LEAD COMPLIANCE PLAN	LS	1
74	FIBER ROLLS	LF	1,540
75	MOVE-IN/MOVE-OUT (EROSION CONTROL)	EA	8
76	EROSION CONTROL (HYDROSSED)	ACRE	2
77	ROLLED EROSION CONTROL PRODUCT (NETTING)	SQFT	3,570



I-880 SB HOV Lane

Potential Small Business (Networking)



Contractors Network with DBEs and Small Businesses



I-880 SB HOV Lane Questions?

